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10/27/2009

EXAMINER

FERNANDEZ, SUSAN EMILY

ART UNIT

PAPER NUMBER

1651

MAIL DATE

DELIVERY MODE

10/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ATTACHMENT TO ADVISORY ACTION

The response filed September 11, 2009, has been received. The text of those sections of Title 35, U.S. Code, not included in this action can be found in a prior office action.

The amendment filed September 11, 2009, has not been entered since the new language in the proposed amendment requires consultation of the specification to confirm support for the new language. Specifically, the specification must be consulted for the recitation of the following: that the biologically compatible polymer is dissolved in a liquid solution, that the polymer is not electrically conductive, that the liquid solution consists essentially of cell culture medium, that the cells are added to the liquid solution prior to supplying the liquid solution to an outlet, that a polymer melt is supplied, that the liquid outlet is kept at the temperature of the polymer melt, that the gaps are in the range of from about 25 to about 3000 microns in size, that the diameter of the polymer fibres is from about 2 to about 500 microns, and that the liquid comprises water, acetone, ethanol, cell culture medium or DMEM. Moreover, the proposed amendment would require a new search. Further still, the proposed amendment raises issues with respect to 35 U.S.C. 112, second paragraph. First, the limitation that "said gap size is from about 50 microns to about 200 microns *in diameter*" in claim 13 is confusing. Also, no upper limit is provided in claim 18 for "the range of from about 16 μm in size," thus making claim 18 indefinite. Finally, claim 54 recites "consisting essentially of a..." which is also indefinite. Therefore, denial of entry of the proposed amendment is proper at this after-final stage of prosecution.

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The majority of applicant's argument assumes entry of the non-entered amendment, and is thus directed to subject matter which is not presently entered into the claims. However, to the extent the applicant's arguments are applicable to the claims as pending, they do not demonstrate error for the reasons of record. The applicant asserts that Shastri does not teach the method of claim 18, wherein cells having the morphology of nerve cells are produced. However, because Shastri teaches altering the differentiation of cells, any cell can be altered enough to "have a morphology resembling nerve cells." Moreover, claim 18 does not provide specifics as to how closely the morphology is like that of nerve cells in order to be considered one that resembles it.

The applicant discusses the claimed invention, pointing out that the polymer fibers have an electric charge once they are formed. However, given that at one point they have an electric charge, the polymer fibers of the claimed invention can be considered "electrically conducting" polymer fibers. The ability of having an electric charge indicates an ability to conduct electricity and therefore is "electrically conductive."

While Coffee does not suggest that the ratio of the diameter of an individual fiber to the size of the space between individual fibers is critical to the invention of Coffee, it is respectively noted that Sussman and Leong demonstrate that fiber diameter and gap sizes are critical. The claimed fiber diameters and gap sizes also would have been rendered obvious given that the selection of fiber diameters and gap sizes would have been a matter of routine experimentation.

The arguments regarding the polymer not being electrically conductive are directed to subject matter not presently entered.

Thus, the claims must remain rejected for the reasons of record.

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No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN E. FERNANDEZ whose telephone number is (571)272-3444. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leon B Lankford/
Primary Examiner, Art Unit 1651

Susan E. Fernandez
Examiner
Art Unit 1651

sef